

UNIREX EP

Premium Quality Lithium Complex Thickened greases

Product Description

The UNIREX EP[®] brand represents a family of high performance and extremely versatile, long-life multi purpose greases. They have been designed to be suitable for use in a variety of industrial, mobile and automotive applications. There are 5 different grades of UNIREX EP greases and all are formulated using an advanced lithium complex thickener. Polymer enrichment technology enhances the excellent adhesion tendency and water washout resistance of UNIREX EP.

UNIREX EP 0 grease is formulated for use in industrial, mining, forestry, construction and other operations. The worked penetration of UNIREX EP 0 grease lies between a NLGI 0 and 1 grade and this makes it very pumpable in central grease systems. UNIREX EP 0 grease slumps at temperatures as low as -20°C, which enhances its ability to lubricate at lower temperatures.

UNIREX EP 0 MOLY provides the same performance as UNIREX EP 0 with the added benefit of molybdenum disulphide. Moly enhances the extreme pressure load carrying ability. Unirex EP-0 Moly is especially suited in applications such as chassis lubrication, where sliding and rubbing are common.

UNIREX LOTEMP EP grease is formulated with low viscosity basestocks that provide excellent low temperature flow performance and pumpability. UNIREX LOTEMP EP has a NLGI consistency between 1 and 2. It is recommended in cold ambients where low temperature operating and/or dispensing limits are common. UNIREX LOTEMP EP grease offers efficient cold start-up and pumpability which can help reduce greasing down-time in cold ambient conditions. Depending on the type of equipment being lubricated, Unirex LOTEMP EP can be effective over an operating range of -55°C to 110°C and a dispensing temperature limit as low as -40°C. It is recommended that a summer grade of grease, such as Mobil UNIREX EP GC LB be used for chassis operations or in higher temperature bearing applications during warmer summer ambient conditions.

UNIREX LOTEMP MOLY and UNIREX EP 0 MOLY greases offer performance characteristics similar to UNIREX LOTEMP EP, UNIREX EP 0 moly greases respectively. **UNIREX EP 1 MOLY** provides effective performance where an NLGI 1 grease with a heavier ISO VG 220 viscosity is required. All three greases include the extreme pressure protection of molybdenum disulfide. They are well suited in applications where metal is subject to sliding motion, such as hinge pins or fifth wheels of large trucks.

For help in choosing the correct grade of UNIREX EP to use, please contact your Imperial Oil Representative, or call our Technical Desk 800-268-3183 for further assistance.



Features and Benefits

Features	Advantages and Potential Benefits
Adhesion and water resistance	Stays in place to provide consistency, adhesion and rust control which will lead to longer life for the equipment and extended grease service life
High dropping point	Allows use in applications at higher temperatures. Helps to simplify inventories with a single capable grease
Wide temperature range	All grades provide wide operating temperature ranges. UNIREX EP offers a selection of grades to protect equipment in extremely hot and cold applications
Rust and corrosion protection	Outstanding control of rust and corrosion, thereby helping to extend equipment service life
Excellent resistance to thermal, oxidative and structural degradation at high temperatures	Allows for extended service and relubrication life in high temperature applications, which can lead to reduced maintenance
Extreme pressure and Wear protection	UNIREX EP greases contain additives combining extreme pressure resistance and wear protection under severe shock loading and sliding conditions. UNIREX EP provides outstanding protection, thereby protecting equipment and helping to extend the life of lubricated components.
Resistance to water washout and spray off	Stays in place to protect equipment in challenging wet environments
Highly adhesive and cohesive structure	Stay-in-place performance that helps to reduce leakage and prevent water absorption. UNIREX can provide extended service performance

Applications

- In a wide range of applications including: mobile equipment used in construction, mining and forestry operations, industrial machinery and marine applications
- Softer grades of UNIREX can be used in centralized grease systems, gear lubrication where leakage is a problem and in very cold ambient conditions where a semi-fluid grease is required.
- UNIREX LOTEMP grades are designed to be applied in very cold ambient conditions
- UNIREX EP-1 Moly, EP-0 Moly and LOTEMP Moly are designed for use in applications where sliding friction is present Applications include lubrication of mobile equipment chassis and industrial equipment where surfaces slide and rub against each other.

Due to continual product research and development, the information contained herein is subject to changes without notification. Additional important health and safety information on this product can be found in the Material Safety Data Sheet which is available at www.imperialoil.ca or by contacting the Imperial Oil Technical Help Desk at: 1-800-268-3183.

Typical Properties:

	EP 0	EP 0 MOLY	EP 1 MOLY	LOTEMP EP	LOTEMP MOLY
NLGI Grade	0.5	0.5	1	1.5	1.5
Operating Temp. Range, °C	-35 to 110	-35 to 110	-30 to 150	-55 to 110	-55 to 110
Minimum Dispensing Temp., °C (1)	-25	-25	-15	-40	-40
Worked Penetration, @ 25°C, mm/10	350	350	320	300	300
Dropping Point, °C	190	190	280	260	260
Oil Viscosity cSt @ 40°C	68	68	220	10	10
Minimum Timken OK Load, kg (lb)	27.2 (60)	27.2 (60)	27.2 (60)	.22.7 (50)	.22.7 (50)
4 Ball Wear, mm	0.5	0.5	0,5	0.5	0.5
Water Spray Off, wt%	-	-	65	70	70
Water Washout, @ 79°C, wt%	-	-	5.0	-	-
4 Ball EP, kg Weld	200	315	620	200	315
Corrosion Preventive Properties Rating	Pass	Pass	Pass	Pass	Pass
Apparent Viscosity, P at -10°C and 20s ⁻¹	-	-	3,000	-	-
Apparent Viscosity, P at -30°C and 20s ⁻¹	5,000	5,000	-	-	-
Apparent Viscosity, P at -40°C and 20s ⁻¹	-	-	-	5,000	5,000

Precautions

The products described on this data sheet are manufactured from high quality petroleum base stocks, carefully blended with selected soaps and additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Please refer to the Material Safety Data Sheet for further information.

Always protect greases from contamination by dust or water. High-pressure injection of any grease under the skin can cause serious delayed soft tissue damage and should be treated immediately by a physician. To avoid injection injuries, inspect greasing equipment regularly for worn hoses and fittings. Keep fingers away from the nozzle and ensure the nozzle is firmly in place before discharging the grease.

Note: The products described on this data sheet are NOT controlled under Canadian WHMIS legislation.

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